WHAT IS CLAIMED IS:

1. A manifold device for use in sample measurements comprising:

   (a) a manifold body defining a plurality of flow cells therein;

   (b) a plurality of liquid input lines, each liquid input line fluidly communicating with a corresponding one of the flow cells;

   (c) a plurality of liquid output lines, each liquid output line fluidly communicating with a corresponding one of the flow cells, wherein each corresponding liquid input line and liquid output line provides a liquid flow path through the corresponding flow cell; and

   (d) a plurality of probes at least partially disposed within the manifold body, each probe comprising an optical fiber input line and an optic fiber output line, each optical fiber input line and optical fiber output line communicating with a corresponding one of the flow cells.

2. The manifold device according to claim 1 wherein the manifold body has a plurality of apertures and each probe extends out of a corresponding one of the probe apertures.

3. The manifold device according to claim 2 wherein the probes are removable from the manifold body.

4. The manifold device according to claim 1 wherein the manifold body is mounted to a dissolution test apparatus.

5. The manifold device according to claim 1 wherein each probe at least partially defines a corresponding one of the flow cells.

6. The manifold device according to claim 1 wherein:

   (a) each probe includes a light-reflective surface facing an interior of the flow cell;

   (b) each optical fiber input line terminates at a first fiber-optic end in the probe, the first fiber-optic end optically aligned with the light-reflective surface;

   (c) each optical fiber output line terminates at a second fiber-optic end in the probe, the second fiber-optic end optically aligned with the light-reflective surface; and

(d) the optical path provided by each corresponding pair of optical fiber input and output lines in each probe is directed from the first fiber-optic end through the flow cell, is reflected from the light-reflective surface, and is directed to the second fiber-optic end.

7. The manifold device according to claim 1 wherein each optical fiber input line and optic fiber output line provide an optical path through the corresponding flow cell generally transverse to the liquid flow path.

8. A manifold device for use in sample measurements comprising:

(a) a manifold body;

(b) a plurality of flow cells disposed within the body;

(c) a plurality of liquid input lines, each liquid input line fluidly communicating with a corresponding one of the flow cells;

(d) a plurality of liquid output lines, each liquid output line fluidly communicating with a corresponding one of the flow cells, wherein each corresponding liquid input line and liquid output line provides a liquid flow path through the corresponding flow cell;

(e) a plurality of optical fiber input lines, each optical fiber input line communicating with a corresponding one of the flow cells; and

(f) a plurality of optical fiber output lines, each optical fiber output line communicating with a corresponding one of the flow cells in opposing, optically-aligned relation to the optical fiber input line, wherein each corresponding optical fiber input line and optical fiber output line provide an optical path through the corresponding flow cell generally transverse to the liquid flow path.

9. The device according to claim 8 wherein the manifold body is mounted to a dissolution test apparatus.

10. The device according to claim 8 wherein a fiber diameter of the optical fiber output line is the same as a fiber diameter of the optical fiber input line.

11. The device according to claim 8 wherein a fiber diameter of the optical fiber output line is larger than a fiber diameter of the optical fiber input line.

12. A dissolution media sampling system comprising:

(a) a plurality of test vessels;

(b) a plurality of test media sampling lines, each test media sampling line adapted for transferring a quantity of test media from a corresponding one of the test vessels;

(c) a plurality of test media return lines, each test media return line adapted for transferring the quantity of test media back to the corresponding test vessel; and

(d) a plurality of remote flow cells, each flow cell fluidly communicating with a corresponding one of the test media sampling lines and test media return lines, and each flow cell communicating with an optical fiber input line and an optical fiber output line.

13. The sampling system according to claim 12 wherein each test vessel is supported by a vessel plate.

14. The sampling system according to claim 13 wherein the vessel plate is supported by a dissolution media testing apparatus.

15. The sampling system according to claim 14 wherein each test media sampling line terminates at a sampling cannula, and the dissolution media testing apparatus comprises an automated assembly adapted for removably inserting one or more of the sampling cannulas into corresponding test vessels.

16. The sampling system according to claim 12 comprising a plurality of remote fiber-optic probes, each probe communicating with a corresponding one of the flow cells.

17. The sampling system according to claim 16 wherein each probe at least partially defines its corresponding flow cell.

18. The sampling system according to claim 12 wherein each flow cell is disposed in a unitary flow cell manifold.

19. The sampling system according to claim 18 wherein the flow cell manifold comprises a manifold body and a plurality of probes at least partially disposed within the manifold body, and

one of the optical fiber input lines and a corresponding one of the optical fiber output lines are disposed within each fiber-optic probe.

20. The sampling system according to claim 18 wherein each optical fiber input line terminates at a first fiber-optic end communicating with a corresponding one of the flow cells, each optical fiber output line terminates at a second fiber-optic end communicating with the corresponding flow cell, and each first fiber-optic end is disposed in spaced, optical alignment with its corresponding second fiber-optic end.

21. The sampling system according to claim 18 wherein the flow cell manifold is mounted to a dissolution testing apparatus.

22. The sampling system according to claim 12 comprising a first calibration vessel and a calibration media distributing mechanism for selectively transferring a first calibration media held in the first calibration vessel to and from one or more of the flow cells.

23. The sampling system according to claim 22 wherein the first calibration vessel is a blank vessel adapted for holding blank media.

24. The sampling system according to claim 23 comprising a second calibration vessel adapted for holding standard media.

25. The sampling system according to claim 22 wherein the first calibration vessel is a standard vessel adapted for holding standard media.

26. The sampling system according to claim 22 wherein the distributing mechanism comprises a plurality of first valves and a plurality of second valves, each first valve selectively establishing a first input flow path from the first calibration vessel to one of the flow cells, and each second valve selectively establishing a first output flow path from the flow cell to the first calibration vessel.

27. The sampling system according to claim 26 comprising a second calibration vessel, a calibration media sampling valve providing fluid communication to the plurality of first valves from the first calibration vessel and alternately from the second calibration vessel, and a calibration media return valve providing fluid communication from the plurality of second valves to the first calibration vessel and alternately to the second calibration vessel.

28. The sampling system according to claim 12 comprising:

(a) a first calibration vessel;

(b) a first calibration media sampling line adapted for transferring a quantity of first calibration media from the first calibration vessel;

(c) a first calibration media return line adapted for transferring the quantity of first calibration media back to the first calibration vessel;

(d) a first liquid-directing manifold fluidly communicating with the first calibration media sampling line;

(e) a plurality of first manifold output lines fluidly communicating with the first manifold, each first manifold output line selectively communicating with a corresponding one of the flow cells, wherein a flow of first calibration media into the first manifold from the first calibration media sampling line is divided into respective flows into one or more of the first manifold output lines;

(f) a second liquid-directing manifold communicating with the first calibration media return line; and

(g) a plurality of bypass lines, each bypass line fluidly communicating with the second manifold and selectively communicating with a corresponding one of the flow cells, wherein a flow of first calibration media into the second manifold from one or more of the flow cells is combined into a flow into the first calibration media return line.

29. The sampling system according to claim 28 comprising:

(a) a second calibration vessel;

(b) a second calibration media sampling line adapted for transferring a quantity of second calibration media from the second calibration vessel;

(c) a second calibration media return line adapted for transferring the quantity of second calibration media back to the second calibration vessel;

(d) a first flow control device for selectively establishing fluid communication from the first calibration media sampling line or the second calibration media sampling line to the first liquid-directing manifold; and

(e) a second flow control device for selectively establishing fluid communication from the second liquid-directing manifold to the first calibration media return line or the second calibration media return line.

30. The sampling system according to claim 12 wherein at least one of the optical fiber input lines communicates with a light radiation source.

31. The sampling system according to claim 30 wherein at least one of the optical fiber output lines communicates with a sample analyzing apparatus.

32. The sampling system according to claim 12 comprising a pumping device adapted for causing liquid flow through at least one of the flow cells.

33. A dissolution media preparation and/or testing apparatus comprising:

(a) a structural frame;

(b) a vessel plate supported by the frame and having a plurality of vessel-holding apertures adapted for supporting a plurality of vessels;

(c) a plurality of flow cells supported by the frame and disposed in remote relation to the vessel-holding apertures;

(d) a plurality of liquid input lines, each liquid input line operatively associated with a corresponding one of the vessel-holding apertures and communicating with a corresponding one of the flow cells;

(e) a plurality of liquid output lines, each liquid output line operatively associated with a corresponding one of the vessel-holding apertures and communicating with a corresponding one of the flow cells;

(f) a plurality of optical fiber input lines, each optical fiber input line communicating with a corresponding one of the flow cells; and

(g) a plurality of optical fiber output lines, each optical fiber output line communicating with a corresponding one of the flow cells.

34. The apparatus according to claim 33 comprising a manifold device supported by the frame in remote relation to the vessel-holding apertures, the manifold device comprising a manifold body in which the flow cells are disposed.

35. The apparatus according to claim 34 wherein the manifold device comprises a manifold body and a plurality of probes at least partially disposed within the manifold body, each probe fluidly communicates with a corresponding one of the flow cells, and one of the optical fiber input lines and a corresponding one of the optical fiber output lines extends within each probe.

36. The apparatus according to claim 34 wherein one of the optical fiber input lines and a corresponding one of the optical fiber output lines are disposed in opposing, optically aligned relation and provide an optical path through a corresponding flow cell.

37. The apparatus according to claim 33 comprising a calibration vessel and a calibration media distributing mechanism for selectively transferring a quantity of calibration media held in the calibration vessel to and from one or more of the flow cells.

38. The apparatus according to claim 33 comprising an automated assembly supported by the frame and movable to insert a distal portion of at least one of the liquid input lines through a corresponding one of the vessel-holding apertures.

39. A dissolution media preparation and/or testing apparatus comprising:

(a) a structural frame;

(b) a plurality of vessels supported by the frame;

(c) a plurality of flow cells supported by the frame and disposed in remote relation to the vessels;

(d) a plurality of liquid input lines, each liquid input line operatively associated with a corresponding one of the vessels and communicating with a corresponding one of the flow cells;

(e) a plurality of liquid output lines, each liquid output line operatively associated with a corresponding one of the vessels and communicating with a corresponding one of the flow cells;

(f) a plurality of optical fiber input lines, each optical fiber input line communicating with a corresponding one of the flow cells; and

(g) a plurality of optical fiber output lines, each optical fiber output line communicating with a corresponding one of the flow cells.

40. A dissolution system comprising:

(a) a plurality of test vessels;

(b) a remote manifold device defining a plurality of flow cells;

(c) a plurality of test media sampling lines, each test media sampling line adapted for transferring a quantity of test media from a corresponding one of the test vessels to a corresponding one of the flow cells;

(d) a plurality of test media return lines, each test media return line adapted for transferring the quantity of test media from the corresponding flow cell back to the corresponding test vessel;

(e) a plurality of optical fiber input lines, each optical fiber input line communicating with a corresponding one of the flow cells;

(f) a plurality of optical fiber output lines, each optical fiber output line communicating with a corresponding one of the flow cells; and

(g) a sample analyzing system communicating with at least one of the flow cells through a corresponding pair of the optical fiber input and output lines.

41. A method for measuring an analyte that is dissolving or has dissolved in test media, comprising the steps of:

(a) transferring a sample of analyte-containing test media from a container into a remote flow cell;

(b) transmitting light radiation of a first intensity from a source optical fiber into the flow cell, wherein a portion of the light radiation is absorbed by analytes in the sample;

(c) transmitting light radiation of a second intensity lower than the first intensity from the flow cell, through a return optical fiber, and to a sample analyzing apparatus; and

(d) returning the sample to the container.

42. The method according to claim 41 comprising the step of filtering the test media prior to transferring the test media into the flow cell.

43. The method according to claim 41 comprising the steps of:

(a) causing a flow of calibration media through the flow cell;

(b) transmitting light radiation through the source optical fiber, through the calibration media residing in the flow cell, through the return optical fiber, and to the sample analyzing apparatus; and

(c) stopping the flow of calibration media through the flow cell.

44. The method according to claim 41 comprising the step of using a fiber-optic probe communicating with the flow cell to transmit light radiation to and from the flow cell.

45. The method according to claim 41 comprising the step of using a manifold device incorporating a plurality of flow cells.